

# **Pinostrobin – An Anti-Leukemic Flavonoid from *Polygonum lapathifolium* L. ssp. *nodosum* (Pers.) Dans**

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Z. Naturforsch. **61c**, 64–68 (2006); received July 22/August 22, 2005

Aim of study: Search for plant compounds possessing anti-leukemic properties.  
Results: We have shown that 5-hydroxy-7-methoxy flavanone (pinostrobin) isolated from *Polygonum lapathifolium* ssp. *nodosum* quickly penetrates through cytoplasm to the cellular nucleus of the cultured cells, and gives intensive apoptotic response in stimulating leukemic cells *in vitro*. The number of apoptotic cells increased with the concentration of pinostrobin: 10 nM – 25% and 60%; 100 nM – 45% and 76%; 1  $\mu$ M – 70% and 88% for Jurkat and HL60 cell lines, respectively.

Conclusion: Pinostrobin may be considered as a good candidate for a leukemia chemopreventive agent.

**Key words:** Pinostrobin, *Polygonum lapathifolium* ssp. *nodosum*, Anti-Leukemic Activity